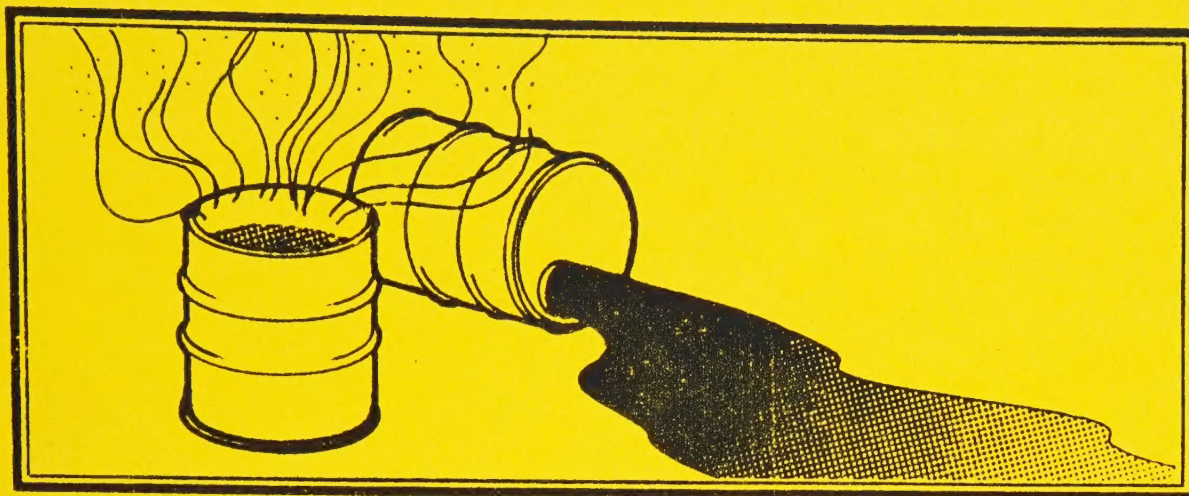


5-21-84
DRAFT
DECEMBER
1982



San Francisco Bay Area

Hazardous Spill Prevention and Response Plan

SUMMARY

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

MAY 16 1984

UNIVERSITY OF CALIFORNIA

ASSOCIATION OF BAY AREA GOVERNMENTS



SAN FRANCISCO BAY AREA

HAZARDOUS SPILL PREVENTION AND RESPONSE PLAN

SUMMARY

DRAFT

December 1982

**Association of Bay Area Governments
Hotel Claremont
Berkeley, California 94705**

84 01202 Summ.

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB - 1 2024


UNIVERSITY OF CALIFORNIA

THE SAN FRANCISCO BAY AREA
SPILL PREVENTION AND RESPONSE PLAN

SUMMARY

TABLE OF CONTENTS

| <u>Chapter</u> | <u>Page</u> |
|-------------------------------------|-------------|
| I. EXECUTIVE SUMMARY | I- 1 |
| II. RECOMMENDATIONS | II- 1 |
| III. FOR MORE INFORMATION | III- 1 |



Digitized by the Internet Archive
in 2024 with funding from
State of California and California State Library

<https://archive.org/details/C124877510>

CHAPTER I

EXECUTIVE SUMMARY

This plan is designed to provide guidance to local San Francisco Bay Area governments faced with growing responsibilities and concerns relating to the presence of hazardous materials within their jurisdictions. Communities do not stand alone in the problems they face on this issue; spill response typically involves numerous agencies and jurisdictions. At a time of limited resources, most local governments cannot afford to work independently, nor can they afford not to be prepared. This plan is therefore intended to provide direction and promote regional cooperation and consistency. It provides an interface between the State Hazardous Material Incident Contingent Plan and local operational plans.

The plan identifies problems and issues related to hazardous spill prevention and response. It then presents recommendations, guidelines and models to solve these problems.

The plan is presented in three separate volumes. Volume 1 presents the "Issues and Recommendations". Support documents are presented in separate reports: Volume 2, "Risk Assessment" presents detailed maps and methodology developed during the risk assessment phase; and Volume 3, "Technical Support Documents" provides additional discussions and background material on each section of the plan.

The plan was developed under the guidance of a 45-member Task Force that included representatives from a cross section of local, state and federal agencies and industries directly involved with the management of hazardous materials. In addition, four supporting subcommittees focused on risk assessment, prevention, response, and training. These subcommittees collected and assessed information on existing programs, addressed specific issues relating to their particular disciplines, and made recommendations on elements for a regional spill program. The Task Force reviewed and adopted policies and plan elements, in addition to looking at liability and fiscal concerns. The following discussion summarizes the major findings and areas addressed in the plan.

Risk Assessment

A regional risk assessment was conducted to provide a framework for developing prevention and response programs. This also provides a baseline for communities to conduct more intensive investigations of their local jurisdictions. Risk was determined through an evaluation of hazardous material concentration (selected industrial sites), principal transportation routes, hazardous material transfer points, previous spill records, population and projected growth, and the location of vulnerable water resources. This assessment indicated that the critical regions generally form a strip bordering the south and central bay. The most critical areas consist of east San Francisco extending into San Mateo County, the Silicon Valley area of Santa Clara County, the east bay extending from Alameda through Rodeo, and a small strip encompassing Martinez and Concord extending along the shoreline to Antioch. The north bay counties generally have a much lower risk from hazardous material spills, although they are not precluded from experiencing a significant incident. In terms of spill data, there are approximately two spills reported daily, on the average, in the Bay Area.

Prevention

A sample survey was carried out on general prevention programs conducted by local government. This provided a baseline of typical activities undertaken by local fire departments. It was found that local fire department prevention programs can be expanded to include hazardous materials. However, few local agencies have done so to a significant extent. Next, a more detailed analysis was made on the various components of a prevention program. This led to a series of recommendation on the following key elements of a prevention program.

- o minimum prevention programs at fixed and transfer facilities
- o disclosure ordinances
- o comprehensive hazmat model code
- o zoning
- o enforcement of transportation regulations
- o routing
- o rail and pipeline safety
- o civil injunction

Response

A look at existing response capabilities showed that state and federal resources are limited and not designed to respond to all the hazardous material incidents occurring in the Bay Area. Given the risks and responsibilities facing local governments, it was evident that most jurisdictions are not adequately prepared to respond. However, if proposed and existing local government hazardous material response (HAZMAT) teams become fully developed, regional response capabilities in the highest risk areas will be sufficient. In addition, private response capabilities are available and play a vital role in local response plans. Recommendations and guidelines include:

- o mutual response objectives
- o criteria for evaluating local spill plans
- o designation of scene manager and adoption of an incident command system
- o location of HAZMAT teams with specified responsibilities and goals
- o multi-jurisdictional shared use agreements for HAZMAT teams
- o development of tools for defining evacuation areas during toxic gas releases
- o improvements in notification and reporting
- o correction of communications problems
- o public information programs

Training

Hazardous material training currently received by personnel in the public and private sectors was identified and training need characterized. Overall, training courses are often inaccessible and of variable quality. There are no generally accepted standards or criteria for hazardous materials training requirements, nor a focal point for providing such training. An insufficient number of prevention and response personnel in

public agencies, including medical personnel, are adequately trained to deal with hazardous materials. Training received by private companies has been difficult to assess, but appears to be widely variable in both quantity and quality. Inadequate training for public agencies' prevention staff, to the extent that it exists, is a reflection of the low priority given to prevention activities in general. The plan presents a recommended model and outline of training requirements for public response agencies, as well as an outline of training needs for private industry. Finally, a regional training system for the Bay Area is proposed.

Liability

The plan addresses liability for hazardous material spills and spill response. The question of liability is complex and highly dependent on the specific facts of the situation. What does become clear is that local governments do have a responsibility to respond to hazardous material spills within their jurisdictions and may be liable for failure to do so. Therefore, the plan calls upon local governments to examine their present insurance policies for adequacy in covering liability for spill incidents and response. The plan also recommends "Good Samaritan" legislation to limit the liability for persons or organizations called upon by the scene manager to provide assistance during an incident.

Financing

At a time when most local governments are experiencing severe fiscal constraints, funding becomes critical to the implementation of local spills programs. Existing financing opportunities for local hazardous spills programs were identified. The analysis revealed there is little funding available at the state or federal level for local hazardous spill programs. Several potential financing mechanisms are available at the local level, e.g., special taxes, service fees, permit fees and fines. However, a strong commitment is required for local financing to be viable.

Contingency Planning

Lastly, the plan examines mechanisms for ensuring an ongoing planning effort: one important aspect of local cooperative planning is the establishment of Hazardous Materials Planning Advisory Committees in each county. These committees should have permanent status, well defined responsibilities and a wide membership of government and private organizations. Communities need to work with the California Highway Patrol area offices to establish Interagency Agreements delineating agency responsibilities. The regional planning process should also be continued. ABAG will endeavor to serve as regional coordinator for hazardous spill planning. Building upon these continuing planning efforts, the regional plan will be updated as needed.

CHAPTER II

SUMMARY OF RECOMMENDATIONS

RISK ASSESSMENT

- 1.1 A centralized program should be developed to provide a comprehensive source of spill information. Data systems should include records of spill time, specific location, material type and quantity, source, responsible party, reason for the spill, responding and notified agencies, cleanup and containment activities, casualties, costs, and the cleanup agency or company.
- 1.2 A "right-to-know" or disclosure law should be considered as a means of requiring sources dealing with hazardous materials to disclose their activities in order to direct prevention planning and illuminate response needs. Any proposed law needs to be examined with respect to practicality and protection of proprietary rights.
- 1.3 Local communities should conduct inventories to more accurately ascertain the types, quantities and uses of hazardous material in their jurisdictions.
- 1.4 Studies should be conducted to assess the risk of volatile toxic and hazardous air emissions.
- 1.5 Tunnels and bridges offer unusual and serious conditions in the event of a hazardous material spill and should be the focus of a separate study for the Bay Area.
- 1.6 Problems with underground containment need to be assessed with guidelines enacted and enforced regarding storage requirements and remedial action taken at existing sites where problems are apparent.
- 1.7 The regional risk assessment should be updated periodically to make available the most accurate information possible.

PREVENTION

- 2.1 Any prevention programs at fixed facilities should include the following items as a minimum:
 - o adoption of the most recent edition of the Uniform Fire Code;
 - o enactment of a fee schedule for permits;
 - o inventory of hazardous materials and site inspection before permits are issued or renewed;
 - o proper hazardous materials storage before permit issuance and permit renewal;

- o set penalties for violation of the code;
 - o posting of hazard warnings wherever hazardous materials are stored (e.g., National Fire Protection Association 704 system).
- 2.2 It is recommended that the minimum prevention program described in 2.1 be applied to transfer facilities with the exception that inventories not be required.
- 2.3 Local agencies, in the course of prevention and response planning activities at transfer facilities, and in consultation with the individual facility operators, should designate the location and/or person at each facility where up-to-date information about materials present can be obtained promptly in the event of an incident.
- 2.4 In stressing the need for recommendation 1.2, local governments should consider the following disclosure ordinances as examples: the Governor's Model Hazardous Materials Disclosure Ordinance, and those of the cities of Santa Monica, Vallejo, Cincinnati, Ohio and Philadelphia, Pennsylvania.
- 2.5 The issue of public right-to-know is a political decision that will be addressed by each jurisdiction.
- 2.6 The Hazmat Model Code from the Santa Clara County Fire Chiefs' Association should serve as a model for developing local comprehensive hazardous materials management programs.
- 2.7 As the disclosure process and continued inspection and mapping of information provide better understanding of the situation, an effort should be made to evaluate the usefulness of zoning restrictions as a tool for hazardous materials management.
- 2.8 The California Highway Patrol should continue its effort to increase inspection frequency and to identify repeat violators of the hazardous material transportation regulations.
- 2.9 Local law enforcement officers should be trained in the hazardous material transportation regulations so that they can cite violations on city streets.
- 2.10 Routing programs should be considered as a local prevention tool. However, there is a need to assess local movement of hazardous materials to identify the potential for such programs. Proposed routing programs should follow the guidelines presented in Volume 1.
- 2.11 No new state regulations should be enacted at this time regarding the movement of hazardous materials by rail.

- 2.12 Local response agencies should contact rail companies individually to develop prevention and response plans as needed in their jurisdiction.
- 2.13 Rail companies should continue their training programs for local government response personnel.
- 2.14 Coordinated response planning for pipeline safety, as outlined in the California Pipeline Safety Act, should be an integral part of hazardous spill prevention.
- 2.15 The civil injunction should be considered as a critical legal tool available to local district attorneys that is adaptable to the complex problems of enforcement of hazardous material and hazardous waste regulations.
- 2.16 Local inspection and enforcement agency staff should work with the district attorneys to obtain correction of unsafe and hazardous situations before a serious incident occurs.
- 2.17 If specific violations of State law are suspected, the injunction process provides local access to State records otherwise unavailable. Over the longer term, arrangements should be established with state regulatory agencies to report specific violations to the district attorneys. This should improve enforcement, by increasing local awareness of violators, particularly repeat violators, and by encouraging local participation in the enforcement process.

SPILL RESPONSE

- 3.1 All response agencies should adopt a common set of objectives: prevention of hazardous materials incidents; protection of human health and safety, water supply, wildlife, aquatic resources and environment, and property; suppression and containment of release; traffic control; fire suppression; and effective training.
- 3.2 Local spill plans should be evaluated and updated as needed using the recommended criteria presented in Volume 1.
- 3.3 Local response agencies should adopt an incident command system for the scene management of hazardous spills based on the FIRESCOPE Incident Command System. All personnel should be trained in ICS and it should be used in planning response procedures.
- 3.4 Subject to the interpretation of SB 1483 (Vehicle Code 2454 and Government Code 8574.8, August 1982), new legislation may need to be enacted to enable law enforcement agencies to delegate scene management of hazardous spills on local streets and roadways, than highways, to other appropriate public agencies.

- 3.5 Local Hazardous Materials Planning Advisory Committees should be established in each county to update or prepare coordinated action plans.
- 3.6 Local governments should clearly designate the Scene Manager where not already decided. In particular, if localities are given the option of redesignating the Scene Manager for spills on local streets, this designation should be made as soon as possible.
- 3.7 All possible first responders should be able to provide initial hazard assessment, personal safety, notification, site control, evacuation and containment of smaller spills. HAZMAT teams should be capable of better identification, monitoring, containment of most spills, and cleanup of small amounts of relatively non-hazardous materials that can be done quickly without risk to response personnel:

| | <u>First Responders</u> | <u>HAZMAT Teams</u> | <u>Private Cleanup Companies</u> |
|-----------------------------|-----------------------------|-------------------------|--------------------------------------|
| Assessment/Personnel Safety | X | X | X |
| Notification | X | X | |
| Site Control | X | X | |
| Evacuation | X | X | |
| Containment | X | X | X |
| Identification | X | X | X |
| Monitoring | | X | X |
| Cleanup | | X | X |
| Disposal | | | X |

----->
(increasing severity of accident and subsequent
increase in sophistication of capabilities)

- 3.8 The following goals are recommended for an effective HAZMAT team:
 - o HAZMAT teams would be available to respond to all suspected hazardous material spills within predesignated areas, upon notification, where there is no federal or state preemption.
 - o There should be a minimum of four trained HAZMAT members on a team at any one time. This would require a total of at least 10-12 persons on a team.
 - o Teams should be able to respond within 30 minutes.
 - o Teams should carry or have immediate access to the types of equipment listed in Volume 1.

- o Team members should receive the Level 3 training described in Volume 1.
- o Besides responding to spills, team members may also be involved in related duties such as inspection, public information, and training of hazardous materials handlers and first responders.

3.9 Existing or proposed local HAZMAT teams should be fully developed to service the following areas:

First Priorities: Oakland, to service surrounding communities in Alameda County; two units in Contra Costa County, one servicing the El Cerrito to Rodeo area and another serving Martinez, Concord and Pittsburg area; Silicon Valley, from Palo Alto to San Jose; San Francisco; and South San Francisco.

Second Priority: San Mateo County (possibly sharing use of South San Francisco teams); Southern Alameda County; Vallejo - Benicia; and Southeast Marin County.

Third Priority: Remaining Bay Area.

- 3.10 At a time of limited resources, funding priorities should be given to those teams serving several communities. Funding for the establishment and maintenance of such teams could appropriately be contributed by the entire service area.
- 3.11 Sharing of public HAZMAT teams should continue and be supported, since it is necessary for effective regionwide spill response as long as economics preclude every city from having a team.
- 3.12 While existing fire mutual aid agreements have provided for extraordinary loans of HAZMAT teams to neighboring jurisdictions, routine team sharing will often require special agreements (e.g., inter-agency agreements, contracts, and joint powers agreements). These special shared use agreements should address issues that are not ordinarily covered in fire mutual aid agreements; the checklist in Volume 1 is recommended as a guide to agencies involved in the development of such agreements.
- 3.13 Private firms may have significant equipment and technical resources, including in-house HAZMAT teams. Local scene managers and planners should examine private capabilities within or easily accessible to their jurisdiction and establish cooperative agreements where possible.
- 3.14 Spill response agencies should maintain or have access to more refined methods and commensurate training for defining evacuation zones than that provided by the DOT Hazardous Materials Emergency Response Guidebook. ABAG should work with the Bay Area Air Quality Management District and other interested agencies to develop a two-tiered system for eventual implementation in the Bay Area: First, a handbook that is

intermediate in sophistication to the DOT guidebook and the Illinois EPA guidebook should be developed for wide distribution to local police and fire department personnel. This handbook should require a minimum level of training and no specialized instrumentation for its use. Second, access to an appropriate computer model should be provided to all spill response agencies in the Bay Area. (All necessary computer hardware and/or communication equipment should be designed to be portable such that they may be transported to spill sites via either van or helicopter.)

- 3.15 U.S. DOT and other appropriate federal and state agencies should sponsor verification and sensitivity tests for the variety of methods currently in use to define evacuation zones during toxic gas release emergencies. Special problems posed by microclimatic variations with cold vapor clouds should also be assessed, and appropriate methods developed for handling these situations.
- 3.16 911 systems should be adequately funded and organized to serve as part of a centralized notification system for hazardous spills. Similarly, the CHP and OES system should be adequately funded to provide the statewide notification network.
- 3.17 Notification call lists should be developed and updated by all response agencies in cooperation with the local Hazardous Materials Planning Advisory Committees. These should become standard operating procedures for local public safety dispatchers, including those at 911 centers. A guide for developing local call trees is presented in Volume 1.
- 3.18 Emergency Services Offices should develop notification agreements with major industries within their jurisdictions. Industry is encouraged to install early warning systems for hazardous material releases.
- 3.19 Incident report forms should be available to all likely scene managers and dispatchers. A model information report form and model work form are presented in Volume 1.
- 3.20 Notification and reporting procedures should be a standard part of all training programs, at least at the field supervisor level and above.
- 3.21 With the passage of AB 3019, public utilities, municipal and privately owned, are required to belong to a regional notification center. This notification center, i.e., Underground Services Alert (USA) should be informed of the location of all pipelines. In the event of a spill entering underground passageways, public agencies should notify USA pipeline owners for assistance and information.

- 3.22 Shippers of hazardous materials should be notified immediately of an incident involving their commodities since they should know what the materials are and how to properly handle them.
- 3.23 Inventories of hazardous materials, when keyed into the block or address files used by the public safety dispatch centers, should facilitate the notification of proper response personnel inside and outside the agency.
- 3.24 Recognizing that CHP and OES are presently developing the details of a statewide notification and reporting system, it is recommended that this system include revisions of the Vehicle Code to require spills to be immediately reported to the CHP, police or appropriate local agency, identifying what the spilled material is.
- 3.25 Local regulations should be developed mandating the spiller of a hazardous material release to notify the local emergency response agency immediately after the incident occurs.
- 3.26 The overall strategy to address specific interagency communication problems should be:
- o First, develop intracommunication capabilities (within departments, cities and counties). There are so many levels of government that local cities and counties must develop their own systems.
 - o Second, develop intercommunications capabilities (among counties, state and federal agencies) to combine individual capabilities.
 - o Third, develop working relationships with local amateur radio emergency response groups to facilitate rapid and adequate use of existing communications capabilities during major incidents.

Special considerations are presented to assist individual jurisdictions in this effort.

- 3.27 In order to address communication problems, there should be a regional focal point (e.g., Region 2 of the State Office of Emergency Services or ABAG) to facilitate interagency coordination and to devise guidelines for ongoing intraagency efforts.
- 3.28 A single notification system should be publicized for public use in reporting a spill of an unknown or hazardous substance.
- 3.29 The public should be educated as to when notification is necessary and what information they will need to provide.

- 3.30 The capabilities of 911, Zenith-12000 and local police/fire departments to receive and act upon initial spill reports should be assessed and, if necessary, improved.
- 3.31 Once the material is known, members of the general public should continue to call the San Francisco Regional Poison Control Center for health information. The Poison Control Center's telephone number should be included in any public information material or campaign. Procedures should be made to notify Poison Control should a spill occur to alert them to possible calls from concerned citizens. The efforts of the Poison Control Center should be supported and continued, as it provides a unique, essential service to the region.
- 3.32 In order to effectively disseminate information to the public on a large scale, local media, emergency responders and public information officers from appropriate agencies should coordinate efforts and plan dissemination of information before incidents occur.
- 3.33 Local public health officers organizations and community disaster organizations should be notified in cases of large hazardous material incidents. Additionally, through the medical association, physicians should be made aware of the procedures to be followed and resources available during hazardous materials spills so that they can treat their patients appropriately.
- 3.34 A concerted public information campaign focussing on what citizens should do in case of a toxic spill or release should be conducted in the Bay Area. A citizens guide to hazardous spills is presented in Volume 1.
- 3.35 Small businesses should be made aware of and utilize resources such as MSDS's, professional and trade associations, government agencies and local fire departments for providing information and training to their employees, as mandated by law.
- 3.36 Local fire/public safety departments should work with small businesses, as in the city of Santa Clara, to educate and inform them on proper handling, use and storage of hazardous materials.
- 3.37 Response agencies should develop working relationships with members of the media so that, in the event of a spill, reporters will know whom to contact for reliable information. As recommended by the training subcommittee, media relations should be included in response training.
- 3.38 A media workshop should be held to promote good and effective working relationships between the media and the response agencies with whom they will be involved in case of a hazardous materials incident.

TRAINING

- 4.1 Public agencies having a role in hazardous spill response should provide specialized training to their employees using the model and outline presented.
- 4.2 Since staffs of volunteer fire departments are not paid employees and therefore typically hold other full time jobs, the method for training volunteers in dealing with hazardous materials must be made particularly convenient to their needs. Volunteer fire departments should receive Level 1 and Level 2 training, and should develop agreements with other agencies for assistance should Levels 3 and 4 expertise be needed.
- 4.3 Private industries, having the primary role in preventing incidents, should provide specialized hazardous materials training to their employees, following the general guidelines presented, and with flexibility to tailor such training to the needs of their particular industry and employees.
- 4.4 Agencies having responsibility for inspections and prevention education/information activities, should recognize the importance of prevention and make it a high priority by allocating a greater portion of their resources to it.
- 4.5 Staff with responsibility for prevention should receive specialized training in hazardous materials as a regular part of their professional preparation.
- 4.6 Medical response personnel, in order to protect the health of their patients and themselves, should receive job-specific hazardous materials training from a central source which would: identify who needs training; match professional responsibilities to specific contents of training; and support adoption of standards for professional preparation which include such training.
- 4.7 Hospitals providing emergency services should carry out hazardous spill drills as part of their required testing of general emergency medical response capabilities.
- 4.8 In order to improve hazardous materials training in the Bay Area in the most cost-effective and efficient manner, a regional hazardous materials training system should be set up through the local community colleges. The system should be designed and implemented according to the guidelines described.

LIABILITY AND FINANCING

- 5.1 "Good Samaritan" legislation should be enacted to limit the liability for persons or organizations called upon by the scene manager to provide assistance during an incident.

- 5.2 Local governments should examine their present insurance policies for adequacy in covering liability for spills incidents and response.
- 5.3 Local agencies should establish a reserve fund or participate in an insurance program in anticipation of spill related expenditures.
- 5.4 Additional mechanisms should be explored to assist local governments in paying for emergency response and cleanup actions.

CONTINUING PLANNING

- 6.1 Counties with existing Hazardous Materials Planning Advisory Committees should strengthen their capabilities by:
 - o giving them permanent status, perhaps affiliated with the Disaster Council;
 - o delineating their responsibilities, particularly in contingency plan preparation and interagency training;
 - o assuring a wide membership of government and private organizations.

Those counties without Hazardous Material Planning Advisory Committees should form one as soon as practical using the planning and coordination role of local offices of emergency services.

- 6.2 Wherever practical, these committees or the present Disaster Council should be given the power to adopt official plans through a Joint Powers Agreement. In other counties, local governments are urged to participate fully in committee deliberations and adopt plans as soon as possible.
- 6.3 After reviewing the CHP Interagency Agreements with the County Hazardous Materials Planning Advisory Committees and local offices of emergency services, local agencies should sign and support these agreements as soon as an acceptable contract is developed. These agreements can serve as the cornerstone for revised countywide spills response plans.
- 6.4 The regional planning process, having successfully coordinated activities of various response agencies, identified common problems and recommended model approaches, should be continued. ABAG should continue to serve as regional coordinator for hazardous spill planning.

CHAPTER III

FOR MORE INFORMATION

For further information, refer to the following documents:

- o San Francisco Bay Area Hazardous Spill Prevention and Response Plan, Volume 1: Issues and Recommendations, Draft, December 1982. (Final available February 1983).

Volume 1 is the body of the Regional Spill Plan. It presents a summary of the risk assessment for the Bay Area, along with further discussion of all the plan recommendations. The appendices of Volume 1 contain tools for local planning such as the Governor's Model Disclosure Ordinance, list of appropriate response equipment, guidelines for HAZMAT shared use agreements, a notification guide, a model reporting form, and a brief citizen's guide to spills.

- o San Francisco Bay Area Hazardous Spill Prevention and Response Plan, Volume 2: Risk Assessment, December 1982.

Volume 2 presents the methodology used for the risk assessment. It includes a series of maps for each Bay Area county, showing areas of key industrial concentration; location of military bases and pipelines; average truck, port and rail traffic; and spill incidents. The summary analysis is also included.

- o San Francisco Bay Area Hazardous Spill Prevention and Response Plan, Volume 3: Technical Support Documents, to be available January 1983.

Volume 3 presents the background information used to develop specific plan recommendations. It is a compilation of over 40 technical memoranda and issue papers discussed by the subcommittees and Task Force.

- o Directory of Private Response Capabilities in the Bay Area, December 1982.

This directory is designed to assist local governments in contracting private resources to assist in spill response. It provides basic information on private cleanup contractors and industrial cleanup cooperatives in the Bay Area. Other specialized resources are also listed, including laboratories, chemical reclamation firms, Class I disposal sites, and telephone information services.

These reports are available at cost from ABAG. Call or write ABAG c/o Department of Public Affairs for a current price list. They may also be reviewed at the following libraries:

MTC/ABAG Library
Hotel Claremont
Berkeley, California 94705

Institute of Governmental Studies
(IGS) Library
109 Moses Hall
University of California
Berkeley, California 94720

Alameda County Library
Business and Government Branch
2201 Broadway
Oakland, California 94612

Fremont Main Library
39770 Paseo Padre Parkway
Fremont, California 94638

Oakland Public Library
Main Library
125 14th Street
Oakland, California 94612

Contra Costa County Library
Administration/Main Library
1750 Oak Park Boulevard
Pleasant Hill, California 94523

Richmond Public Library
Civic Center Plaza
Richmond, California 94804

Marin County Library
Civic Center Administration Building
San Rafael, California 94903

Napa City-County Library
1150 Division Street
Napa, California 94558

League of California Cities
1400 K Street, 4th Floor
Sacramento, California 95814

San Francisco Public Library
Science, Technology & Government
Documents
Civic Center
San Francisco, California 94102

San Mateo City Library
55 West Third Avenue
San Mateo, California 94402

San Mateo County Library
Central Branch
25 Tower Road
Belmont, California 94002

San Jose Public Library
Main Branch
180 W. San Carlos
San Jose, California 95113

Government Documents Department
Cecil B. Green Library
Stanford University
Stanford, California 94304

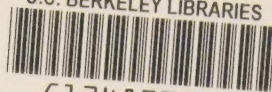
Solano County Free Library
1150 Kentucky Street
Fairfield, California 94533

Sonoma County Library
Third and E Street
Santa Rosa, California 95404

Petaluma City Library
100 Fairgrounds Drive
Petaluma, California 94952

Water Resources Center Archives
Northgate Hall, Room 40
University of California
Berkeley, California 94720

U.C. BERKELEY LIBRARIES



C124877510

